

WHAT IS CLAIMED IS:

1. An apparatus for guiding a door leaf of a sliding door comprising:
at least one guide element; and
5 a movable belt engaging said at least one guide element and having a portion adapted for contact with a guide surface associated with the door leaf whereby when said at least one guide element is mounted to extend generally parallel to a plane of the door leaf, said portion of said movable belt contacts the guide surface during sliding of the door leaf relative to
10 the guide surface.
2. The door according to claim 1 wherein the guide surface is disposed in a region of a door frame or a door case for the door leaf and said at least one guide element is attached to the door leaf.
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3. The door according to claim 1 wherein the guide surface is disposed in the door leaf and said at least one guide element is attached to a region of a door frame or a door case for the door leaf.
- 20 4. The door according to claim 1 wherein the guide surface is a pair of facing guide surfaces and including at least another guide element mounted to extend generally parallel to the plane of the door leaf and another movable belt engaging said at least another guide element and having a portion contacting one of the facing guide surfaces during sliding of said door leaf relative to the facing guide surfaces.
- 25 5. The door according to claim 1 wherein said at least one guide element is a roller rotatably attached to the door leaf.
6. The door according to claim 1 wherein said at least one guide element holds
30 said movable belt against the guide surface.

7. The door according to claim 1 wherein said movable belt seals against the guide surface to prevent air leakage between opposite sides of the door leaf.

8. The door according to claim 1 including means for restricting movement of
5 said movable belt laterally relative to the guide surface.

9. The door according to claim 1 wherein said movable belt has resilient properties.

10 10. The door according to claim 1 wherein said movable belt has a laminated structure.

11. A door used in an elevator installation comprising:
at least one elevator door leaf;
15 at least one guide element extending generally parallel to a plane of said at least one elevator door leaf; and
a movable belt engaging said at least one guide element and having a portion adapted for contact with a guide surface during sliding of said at least one elevator door leaf relative to the guide surface.

20 12. The door according to claim 11 including another guide element extending generally parallel to the plane of said at least one elevator door leaf and said movable belt being an endless belt engaging said another guide element.

25 13. The door according to claim 11 wherein said movable belt has a first end fixed to said at least one elevator door leaf and a second end fixed relative to the guide surface.

14. The door according to claim 11 wherein at least one said guide element includes a belt guide portion engaging said movable belt and having a first diameter, a lower end plate attached at a lower end of said belt guide portion and having a second diameter larger than said first diameter, and an upper portion attached at an upper end of
5 said belt guide portion and having a third diameter larger than said first diameter.

15. The door according to claim 14 including a roller bearing mounted in said at least one elevator door leaf and rotatably retaining said upper portion of said at least one guide element.

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16. The door according to claim 11 wherein said at least one guide element is adapted to extend into narrowed portions of a groove above and below the guide surface for restricting movement of said belt laterally relative to the guide surface.

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17. A sliding door comprising:

at least one door leaf;

a pair of spaced apart first guide elements mounted to extend generally parallel to a plane of said at least one door leaf;

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a first movable belt engaging said first guide elements and having a portion adapted for contact with a first guide surface during sliding of said at least one door leaf;

a pair of spaced apart second guide elements mounted to extend generally parallel to the plane of said at least one door leaf; and

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a second movable belt engaging said first guide elements and having a portion adapted for contact with a second guide surface during sliding of said at least one door leaf, said first and second movable belts being in contact.